BBA

Lipids and Lipid Metabolism

Vol. 1128, Nos. 2/3; 30 October 1992

Contents

Review

Mammalian lipoxygenases: molecular structures and functions
S. Yamamoto (Japan) 117

Regular Papers

Hypertriglyceridemia is exacerbated by slow lipolysis of triacylglycerol-rich lipoproteins in fed but not fasted streptozotocin diabetic rats
J.C.L. Mamo, T. Hirano, A. Sainsbury, A.K. Fitzgerald and T.G. Redgrave (Australia, Japan) 132

Time-dependent utilization of platelet arachidonic acid by the neutrophil in formation of 5-lipoxygenase products in platelet-neutrophil co-incubations
C. Antoine, R.C. Murphy, P.M. Henson and J. Maclouf (USA, France) 139

Antioxidant activities of probucol against lipid peroxidations
N. Gotoh, K. Shimizu, E. Komuro, J. Tsuchiya, N. Noguchi and E. Niki (Japan) 147

Characterization of three arylsulfatases in semen: seminolipid sulfohydrolase activity is present in seminal plasma
B.M. Gadella, B. Colenbrander, L.M.G. Van Golde and M. Lopes-Cardozo (Netherlands) 155

Oxidized HDL are much less cytotoxic to lymphoblastoid cells than oxidized LDL
Y. Alomar, A. Nègre-Salvayre, T. Levade, P. Valdiguié and R. Salvayre (France) 163

Modified apolipoprotein pattern after irradiation of human high-density lipoproteins by ultraviolet B
S. Salmon, R. Santus, J.C. Mazière, M. Aubailly and J. Haigle (France) 167

Combined action of paraquat and superoxide on the peroxidation of detergent-dispersed linolenic acid
M. Tomita, T. Okuyama, A. Ueki, H. Watanabe and S. Kawai (Japan) 174

Opposite regulation of hepatic lipase and lecithin:cholesterol acyltransferase by glucocorticoids in rats
H. Jansen, A. Van Tol, J. Auwerx, G. Skretting and B. Staels (Netherlands, Belgium, Norway) 181

Effect of interleukin-1 alpha on lipoprotein lipids in cynomolgus monkeys: Comparison to tumor necrosis factor
W.H. Ettinger, L.A. Miller, T.K. Smith and J.S. Parks (USA) 186

Effects of 2-tetradecylglycidic acid on rat platelet energy metabolism and aggregation
H. Ishikura, N. Takeyama and T. Tanaka (Japan) 193

Lipid composition, phospholipid profile and fatty acid of rat caecal mucosa
V. Ruiz-Gutierrez, C.M. Vazquez and F.J. Quintero (Spain) 199

Hypoxia increases stimulus-induced PAF production and release from human umbilical vein endothelial cells
M.S. Caplan, L. Adler, A. Kelly and W. Hsueh (USA) 205

Inhibition by serum components of oxidation and collagen-binding of low-density lipoprotein
N. Kalant and S. McCormick (Canada) 211

Isolation and properties of γ-tocopherol methyltransferase in *Euglena gracilis*
S. Shigeoka, H. Ishiko, Y. Nakano and T. Mitsunaga (Japan) 220

Black lipid membranes of tetraether lipids from *Thermoplasma acidophilum*
J. Stern, H.-J. Freisleben, S. Janku and K. Ring (Germany) 227

Phospholipid modifications during conversion of hepatic myofibroblasts into lipocytes (Ito-cells)
R.M. Guaragna, L. Trugo and R. Borojevic (Brazil) 237

Interaction between high-density lipoprotein subpopulations in apo B-free and abetalipoproteinemic plasma
M.C. Cheung, A.C. Wolf and D.R. Illingworth (USA) 244

The phosphonic acid analog of phosphatidylglycerol phosphate: influence on *Escherichia coli* growth and physiology
L. Ke, R. Engel and B.E. Tropp (USA) 250

continued

BBA

Lipids and Lipid Metabolism

Vol. 1165, 1993

Cumulative Contents

Review

Oxylipin pathway to jasmonates: biochemistry and biological significance
M. Hamberg and H.W. Gardner (Sweden, USA) 1

Regular Papers

Enhancement of platelet functions by low density lipoproteins
I.I. Surya, G. Gorter, M. Mommersteeg and J.W.N. Akkerman (Netherlands) 19

Activation of phospholipases in platelets by polyclonal antibodies against a surface membrane protein
K. Hashimoto, F. Sekiya, J. Takagi, T. Tsukada, F. Sato and Y. Saito (Japan) 27

Changes of membrane phospholipid composition of human erythrocytes in hyperlipidemias. I. Increased phosphatidylcholine and reduced sphingomyelin in patients with elevated levels of triacylglycerol-rich lipoproteins
B. Engelmann, S. Streich, U.M. Schönthier, W.O. Richter and J. Duhm (Germany) 32

Changes of membrane phospholipid composition of human erythrocytes in hyperlipidemias. II. Increases in distinct molecular species of phosphatidylethanolamine and phosphatidylcholine containing arachidonic acid
B. Engelmann, U.M. Schönthier, W.O. Richter and J. Duhm () 38

Synthesis, characterization and some properties of dideoxynucleoside analogs of cytidine diphosphate diacylglycerol
G.M.T. Van Wijk, K.Y. Hostetler, C.N.S.P. Suurmeijer and H. Van den Bosch (Netherlands, USA) 45

A new glycolipid from *Mycobacterium avium—Mycobacterium intracellulare* complex
M. Watanabe, S. Kudoh, Y. Yamada, K. Iguchi and D.E. Minnikin (Japan, UK) 53

Identification and characterization of apolipoprotein(AII-E2-AII) complex in human plasma lipoprotein
M. Tozuka, H. Hidaka, M. Miyachi, K.-i. Furihata, T. Katsuyama and M. Kanai (Japan) 61

Protein transfer between A-I-containing lipoprotein subpopulations: evidence of non-transferable A-I in particles with A-II
M.C. Cheung, A.C. Wolf, R.H. Knopp and D.M. Foster (USA) 68

Mevinolin, a competitive inhibitor of hydroxymethylglutaryl coenzyme A reductase, suppresses enterocyte esterification of exogenous but not endogenous cholesterol
K. Fellermann, F.M. Reimann, G. Herold and E.F. Stange (Germany) 78

Analysis of the binding and association of human intermediate density lipoproteins to HepG2 cells
L. Brissette and L. Falstrault (Canada) 84

Regulation of intestinal apo A-IV mRNA abundance in rat pups during fasting and refeeding
M. Sato, K. Imaizumi, H. Mori and M. Sugano (Japan) 93

Effects of mevinolin treatment on tissue dolichol and ubiquinone levels in the rat
P. Löw, M. Andersson, C. Edlund and G. Dallner (Sweden) 102

Studies on the chemical structure of neutral glycosphingolipids in eggs of the sea hare, *Aplysia juliana*
Y. Yamaguchi, K. Konda and A. Hayashi (Japan) 110

Differential effect of subspecies of lipoprotein containing apolipoprotein A-I on cholesterol efflux from cholesterol-loaded macrophages: functional correlation with lecithin : cholesterol acyltransferase
T. Ohta, R. Nakamura, Y. Ikeda, M. Shinohara, A. Miyazaki, S. Horiuchi and I. Matsuda (Japan) 119

Rapid Report

Homology-derived three-dimensional structure prediction of *Candida cylindracea* lipase
S. Longhi, M. Lotti, F. Fusetti, E. Pizzi, A. Tramontano and L. Alberghina (Italy) 129

continued

Regular Papers

Injury of mouse lymphocytes caused by exogenous methyl linoleate hydroperoxides in vitro
M. Oarada and K. Terao (Japan) 135

Comparison of the molecular species patterns of phosphatidic acid, CDP-diacylglycerols and phosphatidylinositol in potato tuber, pea leaf and soya-bean microsomes: consequences for the selectivity of the enzymes catalyzing phosphatidylinositol biosynthesis
A.-M. Justin and P. Mazliak (France) 141

Analysis of the binding of polymyxin B to endotoxic lipid A and core glycolipid using a fluorescent displacement probe
S.A. David, K.A. Balasubramanian, V.I. Mathan and P. Balaram (India) 147

Persistence of increased cholesteryl ester in human skin fibroblasts is caused by residual exogenous sphingomyelinase and is reversed by phospholipid liposomes
O. Stein, K. Oette, Y. Dabach, G. Hollander, M. Ben Naim and Y. Stein (Israel, Germany) 153

Structural elucidation of a novel phosphonoglycosphingolipid in eggs of the sea hare *Aplysia juliana*
Y. Yamaguchi, M. Ohta and A. Hayashi (Japan) 160

Multiple phospholipase A_2 activities in canine vascular smooth muscle
R. Miyake and R.W. Gross (USA) 167

Structural characteristics of the ceramides of neutral glycosphingolipids in the human female genital tract—their menstrual cycle-associated change in the cervical epithelium and uterine endometrium, and their dissociation in the mucosa of the fallopian tube with the menstrual cycle
K. Takamatsu, M. Mikami, K. Kiguchi, S. Nozawa and M. Iwamori (Japan) 177

Reversibility of the reactions catalyzed by cholinephosphotransferase and ethanolaminephosphotransferase solubilized from rat-brain microsomes
R. Roberti, A. Mancini, L. Freysz and L. Binaglia (Italy, France) 183

In vivo phospholipid modification induces changes in microsomal Δ5-desaturase activity
A.I. Leikin and R.R. Brenner (Argentina) 189

Influence of an increased intake of linoleic acid on the incorporation of dietary $(n-3)$ fatty acids in phospholipids and on prostanoid synthesis in rat tissues
D. Raederstorff and U. Moser (Switzerland) 194

High-level expression in *Escherichia coli* and rapid purification of enzymatically active honey bee venom phospholipase A_2
T. Dudler, W.-Q. Chen, S. Wang, T. Schneider, R.R. Annand, R.O. Dempcy, R. Crameri, M. Gmachl, M. Suter and M.H. Gelb (Switzerland, USA, Austria) 201

Acyl-CoA : cholesterol acyltransferase and 3-hydroxy-3-methylglutaryl-CoA reductase in carp-liver microsomes: effect of cold acclimation on enzyme activities and on hepatic and plasma lipid composition
T. Teichert and E. Wodtke (Germany) 211

Metabolism of intravenously administered 7α-hydroxycholesterol-3β-stearate in the hamster
M. Kishinaka, K. Kosahara, S. Okamoto, H. Oda, H. Ichimiya, K. Chijiiwa and S. Kuroki (Japan) 222

Isolation and characterization of three lysophospholipases from the murine macrophage cell line WEHI 265.1
D.E. Garsetti, L.E. Özgür, M.R. Steiner, R.W. Egan and M.A. Clark (USA) 229

Elevated glucose alters A23187-induced release of arachidonic acid from porcine aortic endothelial cells by enhancing reacylation
M.L. Brown, C.A. Clark, R. Vaillancourt and D. Deykin (USA) 239

Regular Papers

The effect of compounds associated with cigarette smoking on the secretion of lipoprotein lipid by HepG2 cells
W.Y. Craig (USA) 249

Elevated *N*-myristoyl transferase activity is reversed by sodium orthovanadate in streptozotocin-induced diabetic rat
M.J. King, S. Pugazhenthi, R.L. Khandelwal and R.K. Sharma (Canada) 259

Tissue-specific changes in lipid composition and lipoprotein lipase activity during the development of the chick embryo
B.K. Speake, R.C. Noble and R.J. McCartney (UK) 263

A postulated phylogenetic tree for the human apolipoprotein B gene: unpredicted haplotypes are associated with elevated apo B levels
A.M. Dunning, H.-H. Renges, A. Hamsten, P. Talmud and S. Humphries (UK, Sweden) 271

Determination of lipid hydroperoxides in native low-density lipoprotein by a chemiluminescent flow-injection assay
L. Cominacini, A.M. Pastorino, A. McCarthy, M. Campagnola, U. Garbin, A. Davoli, A. De Santis and V. Lo Cascio (Italy, UK) 279

Isolation of pigment-free bulk lipids from thylakoids
C.E. Bratt and H.-E. Åkerlund (Sweden) 288

Effect of dietary α-linolenic acid on functional characteristic of Na^+/K^+-ATPase isoenzymes in whole brain membranes of weaned rats
A. Gerbi, M. Zerouga, M. Debray, G. Durand, C. Chanez and J.-M. Bourre (France) 291

An enzymatic explanation of the differential effects of oleate and gemfibrozil on cultured hepatocyte triacylglycerol and phosphatidylcholine biosynthesis and secretion
R.G. Lamb, J.C. Koch and S.R. Bush (USA) 299

Hepatic monoacylglycerol acyltransferase activity in HA1 and HA7 hepatoma/hepatocyte hybrid cells: regulation by insulin and dexamethasone and by cell density
R.A. Coleman (USA) 306

Characterization of the neutral pH-optimum sphingomyelinase from rat brain: inhibition by copper II and ganglioside GM3
M.D. Lister, C.L. Crawford-Redick and C.R. Loomis (USA) 314

Reversible and irreversible inactivation of preformed pulmonary surfactant surface films by changes in subphase constituents
J.D. Amirkhanian and H.W. Taeusch (USA) 321

Effects of high-density lipoprotein particles containing apo A-I, with or without apo A-II, on intracellular cholesterol efflux
S. Oikawa, A.J. Mendez, J.F. Oram, E.L. Bierman and M.C. Cheung (USA) 327

Rapid Report

Simvastatin inhibits the oxidation of low-density lipoproteins by activated human monocyte-derived macrophages
L.M. Giroux, J. Davignon and M. Naruszewicz (Canada) 335

Erratum 339

Cumulative Contents, Vol. 1165 343

Author Index 346